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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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10/750,677

12/31/2003

Kwang Cheol Shin

11037-162-999

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06/21/2006

MORGAN, LEWIS & BOCKIUS, LLP.

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EXAMINER

SPISICH, GEORGE D

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                   |  |
|------------------------------|-------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/750,677 | Applicant(s)<br>SHIN, KWANG CHEOL |  |
|                              | Examiner<br>George D. Spisich | Art Unit<br>3616                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/31/03, 10/27/04</u> | 6) <input checked="" type="checkbox"/> Other: <u>add'l IDS 8/1/05</u>                  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR 10-1998-0001487 (provided in Applicant's IDS) in view of Beaird (USPN 3,875,556).

KR '487 discloses an airbag system having a driver airbag module (4) and a passenger airbag module (6), a driver seat belt sensor (20) detecting whether a driver seat belt is latched or not, a passenger seat belt sensor (22) detecting whether a passenger seat belt is latched or not, a passenger occupation detection unit (12) for detecting whether a passenger seat is occupied by a passenger or not, and a warning device (alarm 26) for warning of an unlatched state of the seat belt.

KR '487 discloses a first control unit (2) for controlling the driver airbag and the passenger airbag, the first control unit receives information on whether the driver seat belt is latched, information on whether the passenger seat is occupied and information on whether the passenger seat belt is latched and the first control unit generating a belt condition signal based on the received information and a second control unit (integral

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with the first and inherent) receiving the belt condition signal and controlling operation of the driver and passenger warning device based on the belt condition signal. Applicant is only claiming that there is a sensed condition and a control unit that controls a seatbelt warning based on the information. KR '487 clearly performs this function.

KR '487 discloses that the alarming device generates an alarm sound. This is broadly considered to be a "buzzer".

However, KR '487 does not disclose that there is a warning device for the driver's seatbelt condition and a separate warning device for the passenger's seatbelt condition, nor is the alarm disclosed as a warning lamp.

Beird discloses a seatbelt warning system that includes a plurality of lamps for individually indicating the seatbelt latching conditions of a driver and passenger seat belt. The indicator disclosed is a warning lamp.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the airbag/seatbelt warning control arrangement of KR '487 to include separate warning indicators for the driver and the passenger and use a lamp to provide the warning as taught by Beird so as to individually warn or identify the passenger which seatbelt is not properly latched.

Claims 3-8 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over KR '487 in view of Beird (USPN 3,875,556) as applied to claims 1,9 and 16 above, and further in view of Arima et al. (USPN 6,626,463).

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KR '487 in view of Beaird has been discussed in the previous rejection. Although is it inherent that the sensing of KR '487 in view of Beaird would be able to individually detect the presence of an unlatched driver's or passenger's seatbelt and individually activate the warning device (buzzer or lamp), KR '487 in view of Beaird does not disclose using pulse width modulation having a duty ratio. KR '487 in view of Beaird has the ability to warn both the driver and passenger by activated a plurality of warning lamps if both unlatched seat belt conditions are sensed.

Arima et al. discloses a seatbelt device that incorporates pulse width modulation and includes a duty ratio to detect information to control a safety device. This manner of detecting conditions would be an obvious manner of detecting the information already disclosed in KR '487 in view of Beaird. The "varying" of the signal is also inherent in KR '487 in view of Beaird as this combination of references will already be performing a seat belt warning on an individual basis based on received information.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mazur et al. (USPN 6,203,059), Basir et al. (USPN 6,889,215), Cluff (USPN 5,954,775), Fendt et al. (USPN 5,712,784), Nobusawa (USPUB 2004/0163871).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571)


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272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George D. Spisich   
June 12, 2006

 6/12/06  
PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600